Claims:

1.   A method of motion-compensated predictive image encoding, comprising the steps of:

estimating (ME) first motion vectors (MVc, MVl, MVr, MVa, MVb) for first objects (16*16);

5   filtering (MVPF) said first motion vectors (MVc, MVl, MVr, MVa, MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects (8*8), said second objects (8*8) being smaller than said first objects (16*16);

generating (3) prediction errors in dependence on said second motion vectors (MV1, MV2, MV3, MV4); and

10   combining (VLC) said first motion vectors (MVc, MVl, MVr, MVa, MVb) and said prediction errors.

2.   A method as claimed in claim 1, wherein said first objects (16*16) are macro-blocks, said second objects (8*8) are blocks, and said filtering step (MVPF) comprises the
15   steps of:

providing x and y motion vector components of a given macro-block (MVc) and of macro-blocks (MVl, MVr, MVa, MVb) adjacent to said given macro-block (MVc); and

supplying for each block (MV1) of a number of blocks (MV1-MV4) corresponding to said given macro-block (MVc), x and y motion vector components
20   respectively selected from said x and y motion vector components of said given macro-block (MVc) and from the x and y motion vector components of two blocks (MVl, MVa) adjacent to said block (MV1).

3.   A device for motion-compensated predictive image encoding, comprising:

          means for estimating (ME) first motion vectors (MVc, MVl, MVr, MVa, MVb) for first objects (16*16);

          means for filtering (MVPF) said first motion vectors (MVc, MVl, MVr, MVa,

5   MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects (8*8), said second objects (8*8) being smaller than said first objects (16*16);

          means for generating (3) prediction errors in dependence on said second motion vectors (MV1, MV2, MV3, MV4); and

          means for combining (VLC) said first motion vectors (MVc, MVl, MVr, MVa,

10   MVb) and said prediction errors.

4.   A method of motion-compensated predictive decoding, comprising the steps of:

          generating (VLC^{-1}) first motion vectors (MVc, MVl, MVr, MVa, MVb) and prediction errors from an input bit-stream, said first motion vectors (MVc, MVl, MVr,

15   MVa, MVb) relating to first objects (16*16);

          filtering (MVPF) said first motion vectors (MVc, MVl, MVr, MVa, MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects (8*8), said second objects (8*8) being smaller than said first objects (16*16); and

          generating (15, MC) an output signal in dependence on said prediction errors

20   and said second motion vectors (MV1, MV2, MV3, MV4).

5.   A method as claimed in claim 4, wherein said first objects (16*16) are macro-blocks, said second objects (8*8) are blocks, and said filtering step (MVPF) comprises the steps of:

25   providing x and y motion vector components of a given macro-block (MVc) and of macro-blocks (MVl, MVr, MVa, MVb) adjacent to said given macro-block (MVc); and

          supplying for each block (MV1) of a number of blocks (MV1-MV4) corresponding to said given macro-block (MVc), x and y motion vector components respectively selected from said x and y motion vector components of said given macro-block

30   (MVc) and from the x and y motion vector components of two blocks (MVl, MVa) adjacent to said block (MV1).

6.   A device for motion-compensated predictive decoding, comprising:

        means for generating (VLC^{-1}) first motion vectors (MVc, MVl, MVr, MVa, MVb) and prediction errors from an input bit-stream, said first motion vectors (MVc, MVl, MVr, MVa, MVb) relating to first objects (16*16);

5   means for filtering (MVPF) said first motion vectors (MVc, MVl, MVr, MVa, MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects (8*8), said second objects (8*8) being smaller than said first objects (16*16); and

        means for generating (15, MC) an output signal in dependence on said prediction errors and said second motion vectors (MV1, MV2, MV3, MV4).

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7.   A multi-media apparatus, comprising:

        means (T) for receiving a motion-compensated predictively encoded image signal; and

        a motion-compensated predictive decoding device as claimed in claim 6 for 15 generating a decoded image signal.

8.   An image signal display apparatus, comprising:

        means (T) for receiving a motion-compensated predictively encoded image signal;

        a motion-compensated predictive decoding device as claimed in claim 6 for 20 generating a decoded image signal; and

        means (D) for displaying said decoded image signal.

9.   A motion-compensated predictively encoded image signal, comprising:

25   motion vectors (MVc, MVl, MVr, MVa, MVb) relating to first objects (16*16); and

        prediction errors relating to second objects (8*8), said second objects (8*8) being smaller than said first objects (16*16), wherein said prediction errors depend on motion vectors for said second objects (8*8).